

The
Eternal
Safeguard

*August
Red 1937
Junk*



Howell Brothers Inc.,
Poughkeepsie, N. Y.

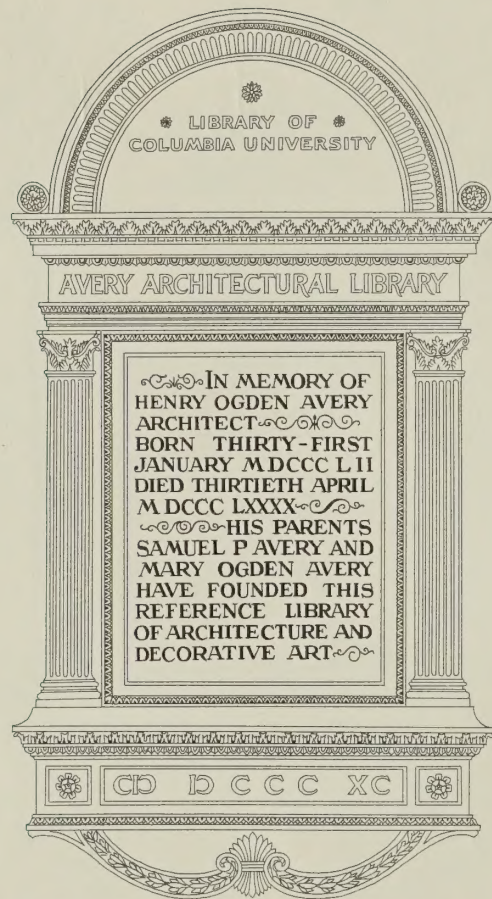
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CON-O-LITE

A Con-O-Lite Burial Vault is the result of a natural product into which have been fused all the ruggedness of stone and concrete plus the built-in forces of man-made beauty and endurance.

The registered trade-mark, CON-O-LITE, covers a fully patented composition that has been proved by actual laboratory tests to be unaffected by the changes of season, of climate, or other natural conditions, such as the presence in the soil of destructive chemicals. That everlasting enemy of the underground, electrolysis, is powerless against it. Cold does not contract it and because it is "Fire-borne," heat does not expand it. It is justly termed

The Eternal Safeguard

HOWELL BROTHERS, INC.

MANUFACTURERS OF

CON-O-LITE BURIAL VAULTS

Pleasant Valley Road,
Poughkeepsie, N. Y.

Telephone 3660
Nights or Sundays, 1331 or 733

Every genuine Con-O-Lite Burial Vault bears this emblem in black and silver:



It is your guarantee of protection and against substitution

IN OFFERING as an outer enclosure a vault that will insure protection beyond that afforded by wood, consideration should be given to three essential points.

1. Is permanent, or only temporary, protection desired? (By permanent, we mean protection which will make disintegration impossible; and, without disintegration, there can be no sunken grave.)
2. May the vault, due to its construction and the strength and enduring quality of the material from which it is made, be relied upon to more than withstand the conditions it will encounter, such as the tremendous thrusting force of frozen earth or the sodden weight of earth during the wet seasons?
3. Can the vault be permanently sealed so that it will exclude both air and moisture, either of which, entering, will destroy the inner enclosure?

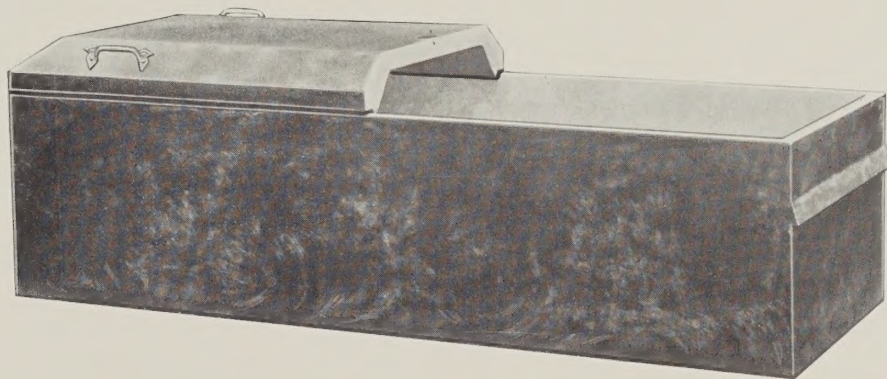
CON-O-LITE BURIAL VAULTS give lasting protection

FIRST, because of the patented composition of materials from which they are made and from which they take their name. The base of this composition is hard and abrasive carbon. Added to this, in gauged proportions, are Portland cement and astringent chemicals which densify the whole into an insoluble mass, described in the patents as “synthetic flint.” Con-O-Lite is inanimate—no season checks for seepage, no porosity, and therefore no expansion and contraction from moisture or temperature changes. And because of the carbon base, Con-O-Lite is unaffected by electrolysis, that most deadly enemy of the underground. Con-O-Lite Burial Vaults are not dependent, inside or out, upon linings or finishes to stop the seepage of moisture (sometimes erroneously referred to as “sweating.”) Not on its surface, but in the composition of Con-O-Lite, itself, is the inanimate density that insures lasting protection.

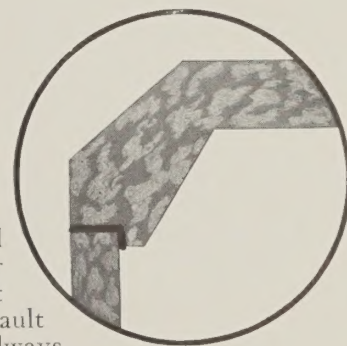
SECOND, because years of designing and testing by engineers have produced, in the Super Seal Con-O-Lite, a vault that is structurally able to withstand all burial conditions. The bottom of the vault, which eventually carries the entire load, is 2 inches in thickness. Side walls and ends are $1\frac{3}{8}$ inches thick, while the continuous bridge-supporting beam design of cover, molded as a single unit and ranging in thickness from 2 to 4 inches, with a direct bearing surface of 310 square inches on the side walls and ends of an adult size vault, assures a crushing resistance far beyond the load of earth in the deepest grave. Owing to the density and structural qualities of Con-O-Lite, the material, the reinforcing of the vault is designed and placed so as to give added strength, and not for simply holding the vault together. It is completely embedded in and protected by Con-O-Lite.

THIRD, because with a sealing area of 484 square inches, the placing of the cover immediately seals the vault, permanently and hermetically, by means of compression. The seal used is mined natural asphalt, the same material which has been found in recent years still keeping intact sealed burials made in Egypt 3000 years before the birth of Christ.

Illustration showing construction of Super Seal vault and cover. The half section of cover shows the arch bridge construction and the sealing area.



Cross section of cover and side wall of vault, before sealing, showing asphalt seal on cover, just as the vault is delivered at the cemetery.



Cross section of cover and side wall of vault, after sealing, showing asphalt seal embedded between vault and cover where it is always under pressure of the load of earth which the vault supports. Immediately the cover is placed, a perfect four-plane, double-caulked positive seal is formed.

Greater Strength than a Burial Vault Could Ever Need.

An adult-sized CON-O-LITE BURIAL VAULT has a direct bearing area between vault and cover, of 310 sq. inches. Seven and one-half tons, or 15,000 lbs. of earth, is not an unusual load for a vault to carry.

This would be but a little more than 48 lbs. to the square inch on the direct bearing area.

R. H. DANFORTH
ENGINEERING CONSULTANT
CLEVELAND, OHIO

INVESTIGATIONS
RESEARCH-TESTS-PROFESSIONAL TESTIMONY
MATERIALS-AERODYNAMICS-HYDRAULICS-MECHANICS

R. H. DANFORTH
H. D. CHURCHILL
P. E. HEMKE
J. H. DYBLE

ADDRESS CARE OF
CASE SCHOOL OF APPLIED SCIENCE

L. S. No. 34073

February 13, 1936

The Con-O-Lite Corporation
9 Main Street
Cortland, New York

Gentlemen:

The following is the result of the
compression test made December 14, 1934 on one of
your Conolite specimens;

Cylinder No.	Diameter inches	Area sq. in.	Ult. Load lb.	Ult. Stress lb/sq. in.
1	6.07	28.9	180,000	6230

Very truly yours,

H. D. Churchill
H. D. Churchill

C/M

The accompanying test shows that a standard size test cylinder of CON-O-LITE, weighing less than 21 lbs., sustained, without fracture, a weight of 90 tons.

The largest coal car, itself weighing over 24 tons, can carry but 75 tons when loaded to capacity.

Water Will Never Penetrate a Con-O-Lite Vault.

Subjected to a continuous water pressure of 80 lbs. to the square inch, for 48 hours, or the same pressure a vault would be subjected to if immersed under 185 ft. of water, this test proves that a CON-O-LITE specimen disc, 8 inches in diameter and 2 inches thick, showed 19/100 or less than 1/5 of an inch penetration.

MEMBER
NATIONAL ENGINEERING INSPECTION ASSOCIATION

E. L. CONWELL & Co.

ESTABLISHED 1894

ENGINEERS-CHEMISTS-INSPECTORS

2024 ARCH STREET

PHILADELPHIA, PA.

December 4, 1933

Con-O-Lite Corporation
Cortland, N. Y.

Gentlemen:

The following is a report of our permeability test of sample of Con-O-Lite submitted by you November 29, 1933.

Lab. No. 222220

The specimen used in the test was a disc 8 inches in diameter and 2 inches thick. The disc was subjected to a water pressure of 80 lbs. per sq. in. for 48 hours. The pressure was applied to a central area of 8.94 sq. in. on one of the flat surfaces of the specimen.

After the pressure had been maintained for 48 hours it was noted that no water had completely penetrated the disc. The specimen was then broken open and the depth of penetration measured. There was no appreciable penetration exceeding 0.19 inches.

Test of Permeability

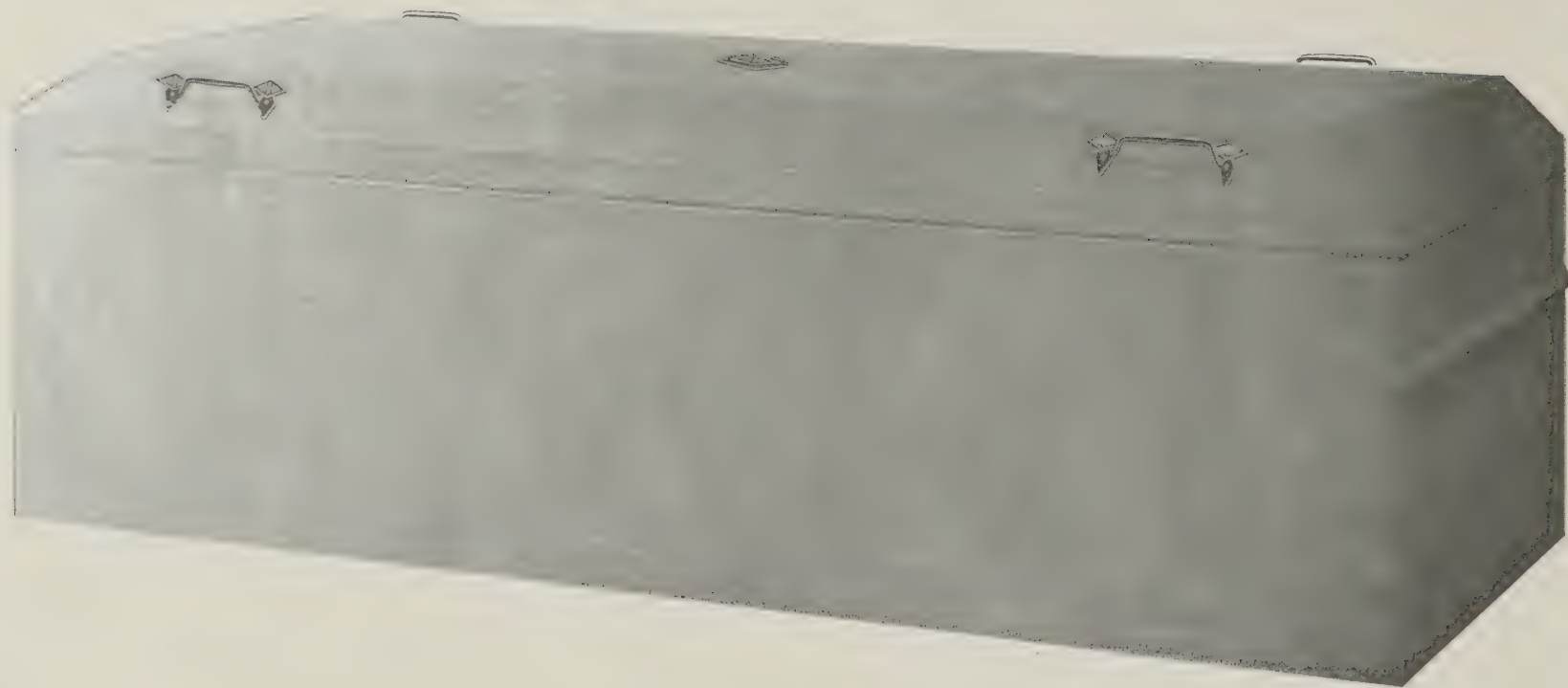
Water-Pressure Applied (lbs. per sq. in.)	Period of Application (hours)	Depth of Penetration (inches)
80	48	0.19

Respectfully submitted,
E. L. CONWELL & CO.

A. S. Peiper, President.

Except for purposes of decoration, a CON-O-LITE vault has no need of outer coatings or inner linings.

CON-O-LITE VAULTS,
when hermetically sealed,
admit neither air nor
water.



Massive and dignified in appearance, a Con-O-Lite vault is only about one-half the weight of common concrete. It is easily serviced, requiring no cumbersome equipment that would mar the beauty of either cemetery or interment. Shown above is the Super Seal design, finished in silver aluminum.



Not only pleasing to the eye during the short burial service, but also meeting the requirements of the most exacting cemetery official. THE ETERNAL SAFEGUARD, finished in Copper Bronze, is indeed "a thing of beauty."

Immune to Fractures from Temperature Changes.

The accompanying copy is a report of a test made at Cornell University, Ithaca, N. Y., one of the most severe tests which can be made for causing disintegration of a material by tearing down the structure. The test proves that CON-O-LITE will withstand an abrupt temperature change of 900 degrees Fahrenheit, without showing any expansion that will cause fracture, even when suddenly immersed in cold water. This is more than ten times the temperature range which a burial vault will ever actually encounter in a grave.

CORNELL UNIVERSITY
DEPARTMENT OF CHEMISTRY

Ithaca, N. Y., Dec. 13, 1934.

Con-O-Lite Corporation,
Cortland, New York.

Dear Sirs:

The test on specimen blocks of Con-O-Lite (one inch square and four inches long), have been completed. The results were as follows:-

The resistance to temperature was determined by placing samples (specimen blocks) in an electric furnace at a known temperature, maintaining the temperature constant for 30 minutes, and then plunging the hot block into cold water. These tests were made at progressively increasing temperatures (in 50°C intervals) until disintegration appeared.

No one of the blocks was noticeably affected at 550°C (1022 F). At 600°C (1112°F) the sharp edges showed some disintegration, and began to crumble. At 650°C (1202°F) the edges were markedly softened, so that they crumbled when rubbed with the finger. This test indicates that the material should be suitable for use up to about 500°C (932°F).

Very truly yours,

F. H. Rhodes
F. H. Rhodes,
Professor of Industrial
Chemistry.

In the test, the reaction which takes place is from extreme dry heat to dampness and cold. True, there are no such sudden and radical changes in underground temperature; but, as the seasons come and go, all ordinary materials, placed underground, are continuously undergoing expansion and contraction because of varying degrees of heat and cold, moisture and dryness; and, unless immune to the effects of this expansion and contraction, eventually there will be fracture and disintegration.

Actual Test of a Con-O-Lite Vault

In this test, not a specimen, but an actual CON-O-LITE Vault, a vault made and sealed in the regular way by Stoker-Smola Vault Company, licensed Con-O-Lite manufacturers, at their factory, 6302-8 Railroad Ave., South Omaha, Neb.—was subjected to a most rigorous immersion test; and the report given is

W. H. CAMPEN, MANAGER

J. R. SMITH, CHIEF CHEMIST



The Omaha Testing Laboratories, Inc.

ANALYTICAL CHEMISTS AND TESTING ENGINEERS

RESEARCH ON MANUFACTURING PROBLEMS

1912 FARNAM STREET-ROOM 3

TELEPHONE AT-5181

OMAHA, NEB.

TESTS REPORTS, PLANT
AND STREET INSPECTION
ON PAVING AND
BUILDING MATERIALS,
BEVERAGES, FLOURS, FEEDS,
FERTILIZERS, FUELS,
DAIRY PRODUCTS, WATER,
STEEL, ALLOYS

June 1, 1932.

Con-O-Lite Corporation,
9 Main St.,
Cortland, N.Y.

Gentlemen:

We make the following report of immersion and strength tests made on a Con-O-Lite vault:

Immersion Test. A CON-O-LITE vault was made and sealed in the regular routine manner. It was then lowered into a tank filled with water, the water being five feet over the top of the vault. At the end of 14 days the vault was removed from the tank, the cover pried off and observations made. The inside of the vault was absolutely dry.

Strength test. Cylinders cast from CON-O-LITE material were subjected to crushing strength tests at the age of 40 days with the following results:

No. 1	5,960 lbs/sq. in.
2	5,720 " " "

Significance of tests - The tests show that CON-O-LITE vaults can be buried under water to a depth of five feet and yet remain dry inside. When it is considered that the conditions of this immersion test are very severe, it is evident that CON-O-LITE vaults will remain dry inside under all cemetery conditions. The crushing strength is many times greater than necessary to carry the load placed on the vault when in place.

Yours truly,

Omaha Testing Laboratories, Inc.

by 

MEMBERS: AMERICAN CHEMICAL SOCIETY, AMERICAN SOCIETY FOR TESTING MATERIALS,
AMERICAN SOCIETY OF CIVIL ENGINEERS

that tests *prove* that a CON-O-LITE BURIAL VAULT *will remain dry inside under all cemetery conditions and that the crushing strength is many times greater than needed to carry any load of earth that a burial vault will ever be called upon to carry.*

Con-O-Lite vaults are furnished regularly with outer surface finished in either Copper Bronze or Silver Aluminum and with a satin-like lining of Silver Aluminum which provides an appropriate background for any casket.

Special finishes to order at small extra expense.

SUPER SEALED CON-O-LITE BURIAL VAULTS
are furnished in the following sizes:

INSIDE DIMENSIONS				OUTSIDE DIMENSIONS	
Sizes	Length	Width	Depth	Length	Width
30	4' 2"	19 $\frac{7}{8}$ "	19"	4' 5"	22 $\frac{7}{8}$ "
35	5' 3"	23"	20"	5' 7"	25"
40	6' 10"	27"	23"	7' 2"	30"
45	7' 0"	29"	25"	7' 4"	32"
55	7' 4"	33"	27"	7' 8"	35"

An interchange service is maintained between the following plants and service centers thereby making Con-O-Lite Burial Vaults available at no added expense for burials at too great a distance to be serviced locally.

Albany, N. Y.	Frederick, Md.	Pittsburgh, Pa.
Annaville, Pa.	Ft. Madison, Iowa	Poughkeepsie, N. Y.
Auburn, N. Y.	Harrisburg, Pa.	Rochester, N. Y.
Binghamton, N. Y.	Jacksonville, Ill.	Scranton, Pa.
Bridgeport, Conn.	Johnson City, N. Y.	Syracuse, N. Y.
Buffalo, N. Y.	Kewanee, Ill.	Towanda, Pa.
Canandaigua, N. Y.	Mendota, Ill.	Trenton, N. J.
Cincinnati, Ohio	New London, Iowa	Utica, N. Y.
Cleveland, Ohio	Nyack, N. Y.	Washington, Pa.
Cortland, N. Y.	Omaha, Neb.	Watertown, N. Y.
Council Bluffs, Iowa	Oquawka, Ill.	Watseka, Ill.
Dover, N. J.	Peoria, Ill.	Wilkes-Barre, Pa.
Elmira, N. Y.	Philadelphia, Pa.	Winston-Salem, N. C.
		Youngstown, Ohio

**CON-O-LITE CORPORATION,
Cortland, N. Y.
Originators and Patentees**

